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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,047	07/23/2003	Isao Hoda	16869P-078900US	1455
20350 7590 06/23/2009 TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834				
EXAMINER				
STOKELY-COLLINS, JASMINE N				
ART UNIT		PAPER NUMBER		
2423				
MAIL DATE		DELIVERY MODE		
06/23/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/626,047

**Applicant(s)**

HODA ET AL.

**Examiner**

JASMINE STOKELY-COLLINS

**Art Unit**

2423

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 22 and 23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 23 is objected to because of the following informalities:
2. Claim 23 is unclear. Limitation "displaying the following information based on the stored channel information that the selected physical channel includes: the digital broadcasting signal, and program information based on VCT information, wherein the selected physical channel includes the digital broadcasting signal, and wherein the VCT information in the digital broadcasting signal cannot be extracted" is written in such a way that the intended meaning of the limitation is unclear. It is not clear which scenario the limitation requires:  
  
displaying 1) the digital broadcasting signal, and 2) program information based on VCT information, where the two displayed pieces of information are based on the stored channel information that the selected physical channel includes, and in the case that the VCT information in the digital broadcasting signal cannot be extracted OR  
  
displaying that the selected physical channel includes 1) the digital broadcasting signal, and 2) program information based on VCT information, in the case that the VCT information in the digital broadcasting signal cannot be extracted OR  
  
displaying that the physical channel includes 1) the digital broadcasting signal, and 2) VCT information that could not be extracted.

For the purposes of examination, based on the applicant's disclosure of his invention, the examiner will interpret the claim limitation to mean displaying that the physical

channel includes 1) the digital broadcasting signal, and 2) VCT information that could not be extracted.

Applicant should write the claim in a manner that clearly conveys the intended meaning of the claim.

Appropriate correction is required.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 22 and 23 have been considered but are moot in view of the new ground(s) of rejection.

On page 5, applicant argues that neither Inui nor Yoneda teach the claim 22 limitation requiring placing a channel in a channel list in the case where VCT information cannot be extracted from the physical channel which includes the digital broadcast signal. While Inui does teach separate columns for the kind/status (i.e. digital or analog) and VCT information (the associated virtual channel) in a channel map compiled by the receiver, Inui does not teach applicant's added limitations requiring "re-selecting a physical channel according to the stored channel information; attempting to extract VCT information in the digital broadcasting signal in case that it is re-selected a physical channel of channel information 2; and updating the channel information 2 according to the program information based on VCT information when VCT information can be extracted.

However, newly found US Patent 6,978,471 to Klopfenstein teaches a system for acquiring and processing broadcast programs and program guide data in which a channel is selected by a user and is determined to be digital or analog (col. 3 ll. 64-col. 4 ll. 1). Once this determination is made, the receiver attempts to acquire program guide information of analog VBI, MPEG PSI, of ATSC PSIP format (col. 4 ll. 1-3). A virtual channel table information is known in the art to be included in PSIP data. The channel is then registered in memory along with its guide type (where the guide type is also an indicator or whether a channel is digital or analog). The recognition of a digital channel whose program information cannot be acquired is taught by col. 7 ll. 27-32. If a channel is re-selected in the case that it was unobtainable and has no program guide information associated with it, the process of determining channel type and attempting to acquire the guide is repeated (fig. 5 and col. 6 ll. 55-col. 7 ll. 37).

Regarding claim 23, US Patent 7,375,771 to Naoi et al teaches displaying a channel map on which a registered digital channel is indicated by number (major and minor channel) and a scan setting is shown as "ON" for channels whose broadcast could be received and "OFF" for channels whose broadcast cannot be received. When combined with Klopfenstein's criteria for deciding if a channel can be acquired, the combined references result in displaying that a physical channel includes a digital broadcast signal.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 22 is rejected under 35 U.S.C. 102(e) as being anticipated by Klopfenstein (US 6,978,471 B1).

Regarding claim 22, Klopfenstein teaches a digital broadcasting receiving method in which channel information of a digital broadcasting is scanned by channel scan and stored, comprising:

selecting a physical channel from a signal received (col. 6 ll. 51-55);

first judging whether or not the selected physical channel includes a digital broadcasting signal (fig. 5 step 410, where acquiring program guide information is detailed in col. 3 ll. 64-col. 4 ll. 3 to include a step of determining whether a received signal represents an analog or digital channel);

second judging whether or not VCT information included in the digital broadcasting signal can be extracted, in case that, it is judged in the first judging that the selected physical channel includes the digital broadcasting signal (fig. 5 step 410);

extracting VCT information in the digital broadcasting signal in case that it is judged in the second judging that the VCT information in the digital broadcasting signal can be extracted (col. 7 ll. 6-9);

storing the following channel information in a memory unit based on the result of the first judging and the second judging:

channel information 1: a first flag which indicates that the selected physical channel includes a digital broadcasting signal and the program information based on VCT information (fig. 5 step 415, col. 7 ll. 6-9); and

channel information 2: a second flag which indicates that the selected physical channel includes a digital broadcasting signal and indicates that the VCT information in the digital broadcasting signal cannot be extracted (col. 7 ll. 33-35 and fig. 4 step 35 illustrates that a channel is saved empty when the guide cannot be acquired).

Limitations "re-selecting a physical channel according to the stored channel information;

attempting to extract VCT information in the digital broadcasting signal in case that it is re-selected a physical channel of channel information 2; and

updating the channel information 2 according to the program information based on VCT information when VCT information can be extracted" are taught by col. 7 ll. 35-38, where the process can be repeated as part of a channel tuning operation. If a channel is re-selected in the case that it was unobtainable and

has no program guide information associated with it, the process of determining channel type and attempting to acquire the guide is repeated (fig. 5 and col. 6 ll. 55-col. 7 ll. 37).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klopfenstein (US 6,978,471 B1) in view of Naoi et al (US 7,375,771 B2).

Regarding claim 23, when read in light of claim 22, Klopfenstein teaches the digital broadcasting receiving method as set forth in Claim 22. Klopfenstein does not teach displaying the following information based on the stored channel information that the selected physical channel includes: the digital broadcasting signal, and program information based on VCT information, wherein the selected physical channel includes the digital broadcasting signal, and wherein the VCT information in the digital broadcasting signal cannot be extracted.

Naoi teaches displaying a channel map on which a registered digital channel is indicated by number (major and minor channel) and a scan setting is shown as "ON" for channels whose broadcast could be received and "OFF" for



channels whose broadcast cannot be received (see fig. 5, where col. 7 ll. 5-6 teaches displaying a channel map). When combined with Klopfenstein's criteria for deciding if a channel can be acquired, the combined references result in displaying that a physical channel includes a digital broadcast signal, and that the VCT information included in the broadcast could not be extracted (where the word OFF in the Scan column would indicate this scenario). It would have been obvious to one of ordinary skill in the art at the time the invention was made to display the channel map information to the user for the benefit of informing a user of the reception status and availability of television channels so that he can know which channels he has access to.

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASMINE STOKELY-COLLINS whose telephone number is (571) 270-3459. The examiner can normally be reached on M-Th 9:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Koenig can be reached on (571) 272-7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jasmine Stokely-Collins/  
Examiner, Art Unit 2423

/Andrew Y Koenig/  
Supervisory Patent Examiner, Art Unit 2423